(54) **METHOD FOR ESTIMATING NOISE LEVEL OF VIDEO SEQUENCE**

(57) Abstract:

PROBLEM TO BE SOLVED: To eliminate risk that a noise level is underestimated by constituting a block to be a motion compensated pixel block or to be mapped to other blocks depending on an estimated value of a motion vector to accompany the block.

SOLUTION: The noise level is normally estimated from a minimum value of the total sum of absolute values of a difference value of a field to which a pixel block is transferred or a difference value of a frame to which the pixel block is transferred. An intermediate field or a frame IF to be interpolated is temporally arranged between the previous field or a frame PF and the next field or a frame NF. When the noise levels σp2, σp3, σ of the present input field or the frame IF are estimated based on differential values DFD, FD between a pixel value of the previous field or the frame PF and a corresponding pixel value of the block corresponding to the next field or the frame NF, one or more blocks in a pair of blocks are the motion compensated pixel blocks or are mapped to other blocks depending on the estimated value of the associated motion vectors.